

UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF NEW YORK

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ON TRACK INNOVATIONS LTD.,	:	
an Israeli company	:	
	:	
Plaintiff and Counterclaim-Defendant,	:	Case No. 12-CV-2224-AJN-JCF
	:	
v.	:	
	:	
T-MOBILE USA, INC.,	:	
	:	
Defendant and Counterclaimant.	:	
	:	
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**T-MOBILE USA, INC.’S RESPONSIVE BRIEF TO ON TRACK INNOVATIONS LTD.’S
OPENING BRIEF ON CLAIM CONSTRUCTION**

Defendant and Counterclaimant T-Mobile USA, Inc. (“T-Mobile”) hereby respectfully submits its Responsive Brief addressing the issues raised in Plaintiff and Counter-Claim Defendant On Track Innovations Ltd.’s (“OTI”) Opening Brief On Claim Construction filed on December 21, 2012.

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I. PRELIMINARY STATEMENT

The parties propose five claim terms for construction. OTI's opening brief (hereinafter "OTI Br."), however, provides flawed reasoning to support its constructions. The following brief, and accompanying Supplemental Declaration of Jack H. Winters, Ph. D. (herein after "Winters Supp. Decl."), explain why the Court should reject OTI's constructions and adopt T-Mobile's.

In the preamble, OTI ignores the specific language of claim 1 and instead speculates about what the inventor "intended" more than a decade ago, or what its expert "thinks" must be a typographical error. For the terms "contact field," "contact mode," and "contactless mode," OTI ignores the actual language of the claim and the patent specification and instead relies on opinions as what those terms "should" mean. As to the language crafted during prosecution by the applicant to avoid the prior art, "allowing data transmission . . . only during the contact mode," OTI ignores the scope disavowed during prosecution and seeks instead to recapture the subject matter given up by the applicants. Also, with respect to that term, as well as the term "at least some," OTI reads limitations into the claim based upon preferred embodiments and ignores the other disclosed embodiments that support the claim language as written.

II. LEGAL STANDARD

OTI's opening brief relies on extrinsic evidence, the declarations of an expert witness and a named inventor (who is also the Chief Technology Officer of OTI) in an effort to divert the Court's attention away from the intrinsic evidence – evidence that supports none of OTI's proposed constructions. The Federal Circuit warns against reliance on improper extrinsic evidence when construing claim terms:

extrinsic evidence in general, and expert testimony in particular . . .
 . . . may not be used to vary or contradict the claim language

Nor may it contradict the import of other parts of the specification. Indeed, where the patent documents are unambiguous, expert testimony regarding the meaning of a claim is entitled to no weight.

Vitronics Corp. v. Conceptronic, Inc., 90 F.3d 1576, 1584 (Fed. Cir. 1996). Likewise, the alleged “intent” of an inventor regarding a patent application or breadth of a claim is also improper extrinsic evidence and should not be considered when construing claim terms. *See, e.g., Vitronics*, 90 F.3d at 1584 (“the inventor’s subjective intent as to claim scope . . . cannot guide the court to a proper interpretation when the patent documents themselves do so clearly.”); *O2 Micro Int’l Ltd. v. Beyond Innovation Tech. Co.*, 521 F.3d 1351, 1362 n.3 (Fed. Cir. 2008) (“an inventor’s self-serving statements are rarely relevant to the proper construction of a claim term.”)

Accordingly, the Court should ignore as improper evidence any declarations by or testimony of OTI’s expert witness, Dr. Apsel, or named inventor, Mr. Itay, violating those principles.

III. ARGUMENT

A. The Preamble Is A Limitation Of Claim 1:

OTI’s Opening Brief (OTI Br. at 8-9) completely misses the point on the preamble of claim 1. OTI’s arguments focus on the use of the word “card,” which OTI argues was “an obvious typographical error.” However, it is not the use of the term “card,” by itself, that breathes life into the claim, but rather it is the entire preamble language of a “*card having contact and contactless modes of operation*” that does.

1. The Preamble Limits The Claim Because It Provides Essential Structure To Define A Card Having Two Modes Of Operation

OTI's construction is incorrect because it ignores the entirety of the preamble and treats it as if it simply recited "A . . . card comprising." In doing so, OTI compounds the error by having to rewrite further claim language that derives its antecedence from the preamble.

Specifically, claim 1 of U.S. Patent No. 6,045,043 (Ex. A¹, hereinafter the "'043 patent") recites two elements that require antecedence from the preamble: "a semiconductor device for operating in said contact and contactless modes" and "a contact field including contacts fixedly connected to the semiconductor device during both said contact and contactless modes." (Ex. A, '043 patent, claim 1) (emphasis added). OTI construes both of those elements as if the claim omitted the word "said," and the contact and contactless modes were recited for the first time in the body of the claim. OTI's construction for "contact mode" and "contactless mode" is incorrect because its construction for the preamble is incorrect.

As a matter of law, the word "said" in both phrases refers to the antecedent recitation of the contact and contactless modes of operation *of the card* in the preamble. *Baldwin Graphic Sys., Inc. v. Siebert, Inc.*, 512 F.3d 1338, 1343 (Fed. Cir. 2008) ("In grammatical terms, the instances of 'said []' in the claim are anaphoric phrases, referring to the initial antecedent phrase.") In addition, as a matter of law, when the body of the claim requires antecedence from the preamble, the preamble is a limitation. *Bicon, Inc. v. Straumann Co.*, 441 F.3d 945, 953 (Fed. Cir. 2006) ("the claim does not recite the complete invention, but refers back to the features of the abutment described in the preamble, so that the references to the abutment in the

¹ All references to "Ex." herein refer to Exhibits A through H attached to the Declaration of Eric J. Lobenfeld, sworn to on January 18, 2013 and submitted herewith.

body of the claim derive their antecedent basis from the preamble.”); *Highmark, Inc. v. Allcare Health Management Sys., Inc.*, 687 F.3d 1300, 1311-12 (Fed. Cir. Aug. 7, 2012) (“recitation of ‘said system’ in elements (e) and (g) can only derive its antecedent basis from . . . the preamble.”)²

OTI’s expert, Dr. Apsel, incorrectly asserts at paragraph 40 that the “claim is technically comprehensible to one of ordinary skill.” (December 20, 2012 Expert Report of Dr. Alissa Apsel, hereinafter “Apsel Rpt.”). However, Dr. Apsel’s remarks are improperly limited to the word “card” alone, rather than “card having contact and contactless modes of operation.” (Winters Supp. Decl. ¶5). The phrase “contact and contactless modes” *is* relied on by other claim elements and does provide necessary meaning to them, *i.e.*, it is the *card* that has the two modes of operation. (Winters Supp. Decl. ¶6). As to Dr. Apsel’s assertion in paragraph 41 that the proper construction is that the card “allow[s] communication in contact or contact modes” of operation, that construction is incorrect because it replaces unambiguous language – the card has two modes of operation – with ambiguous language, that does not identify *what* has the two modes of operation – *i.e.*, the card. (Winters Supp. Decl. ¶8). Dr. Apsel’s incorrect assertion

² OTI’s brief relies on factually distinguishable case law to argue that the preamble does not limit the claim. (OTI Br. at 11). None of those cases involved a claim in which elements recited in the body of the claim rely on the preamble for antecedent basis.

In *Catalina*, the body of the claim did not refer back to the claim preamble which recited a location at predesignated sites for the placement of a claimed electronic terminal. *Catalina Marketing Int’l, Inc. v. Coolsavings.com, Inc.*, 289 F.3d 801, 810 (Fed. Cir. 2002). In *Intirtool*, the body of the claim did not refer back to any of the preamble phrase which recited “hand-held punch pliers for simultaneously punching and connecting overlapping sheet metal.” *Intirtool, Ltd. v. Texar Corp.*, 369 F.3d 1289, 1292 (Fed. Cir. 2004). In *IMS*, the body of the claim never referred back to the claim preamble which recited “control apparatus.” *IMS Tech., Inc. v. Haas Automation, Inc.*, 206 F.3d 1422, 1427 (Fed. Cir. 2000). The Court found the preamble not to be a limitation in any of those cases; without reliance on the preamble for antecedent basis they are inapplicable to the present facts.

that the contact and contactless modes “are modes of operation of the semiconductor device” illustrates that ambiguity. (Apsel Rpt. ¶ 49).

The intrinsic evidence completely contradicts OTI’s construction and OTI’s expert. The ‘043 patent specification repeatedly recites that the invention is a *card having contact and contactless modes of operation*:

- “It is an object of the invention to provide a data transaction card having contact and contactless modes of operation. . . .” (Ex. A, ‘043 patent, Col. 2, ll. 25-27) (emphasis added).
- “In accordance with a broad aspect of the invention there is provided a data transaction card having contact and contactless modes of operation.” (Ex. A, ‘043 patent, Col. 2, ll. 34-36) (emphasis added).

Moreover, the ‘043 patent is unequivocal that the contact field of the card must interact with respective contacts of a card reader in *a contact mode of operation of a card*, that breathes life into all of the remaining limitations of the claim. (Winters Supp. Decl. ¶9).

OTI’s expert seeks to deny this fact by asserting that she “disagree[s] that ‘contact mode’ requires that connection to be between *contacts on a card and contacts of a card reader*.” (Apsel Rpt. ¶ 55). Dr. Apsel identifies nothing in the ‘043 patent that suggests data being exchanged with the card in its contact mode of operation other than with a reader. That is because the ‘043 patent only discloses exchange of data between the card and an external card reader. (Winters Supp. Decl. ¶12).

As to what a “card having a contact mode of operation” means, one need only look to the definition in the specification:

Both “contact” and “contactless” devices are known per se. Generally, such devices are in the form of smart cards provided either with electrical contacts for effecting direct electrical contact with a card reader; or else they are provided with a coil antenna for

effecting contactless bi-directional communication with a remote card reader.

(Ex. A, '043 patent, Col. 1, ll. 11-16).

In the case where “contact” data transmission is required, there is provided a so-called “contact field” having a plurality of contacts, each of which is connected to the microcomputer by means of a respective electrical connection. Data transmission with an external reader is then effected by inserting the card into a suitable reader having spring loaded contacts which bear upon respective contacts in the contact field of the chip card.

(Ex. A, '043 patent, Col. 1, ll. 36-43).

For the above reasons, the Court should reject OTI’s proposed construction of the preamble and adopt T-Mobile’s construction that the preamble means “a card has a mode of operation wherein electrical contacts on the card directly and electrically contact electrical contacts of a card reader to effect data communication, and the card has a mode of operation wherein an antenna in the card effects contactless data communication with a remote reader.”³

2. *The Term “Card” Means Card*

In the Joint Claim Construction statement, OTI’s proposal for the preamble construes “card” as “device.” In order to construe the term that way, OTI ignores both intrinsic and extrinsic evidence that contradicts such a construction.

³ Dr. Apsel is critical of T-Mobile’s construction for contactless mode of operation because it includes the phrase “wherein an antenna in the card . . .” (Apsel Rpt. ¶ 61). Dr. Apsel apparently understands T-Mobile’s position to mean that the entirety of the antenna must be packaged within the card. But T-Mobile means the term to be the same as *part of the* card, because the claim recites “A . . . card . . . comprising: . . . an antenna coil . . .” (Ex. A, '043 patent claim 1)

a) The Use Of “Card” Is Not An Obvious Typographical Error

OTI argues, that the term “card” in claim 1 is allegedly an obvious typographical error that should be corrected by the Court, and the word “device” substituted therefor. (OTI Br. at 9-10). This position is contrary to the facts and the law.

OTI conveniently ignores the history of the application that led to the ‘043 patent and the use of the term “card” in that history.

OTI filed its first application in Israel on December 31, 1996. That application, filed in English, disclosed and claimed a data transaction *card*. (Ex. B, hereinafter “Israeli application”). No mention was made of a data transaction *device*.

Based on that Israeli filing, OTI filed a United States patent application on December 30, 1997 (Ex. C, hereinafter “U.S. App.”) and a PCT application (a filing precursor to a European application) on December 29, 1997 (Ex. D, hereinafter “PCT App.”). In both of those applications, the specification was changed to add disclosure about a data transaction device and the claims were rewritten to recite a data transaction *device*. (Ex. C, U.S. App. at p. 1, ll. 2-6; p. 23, l. 19 – p. 24, l. 12; claims 1-27; Ex. D, PCT App. at Abstract; p. 1, l. 2-6; p. 23, l. 19 – p. 24, l. 12).

On September 22, 1999, however, OTI’s attorney filed an amendment in the United States application changing claim 1 to recite a “data transaction card” instead of the originally claimed “data transaction device.” (Ex. E, hereinafter “U.S. Amendment”). The U.S. patent issued on April 4, 2000 with claim 1 reciting a “data transaction card.” (Ex. A, ‘043 patent). On December 7, 2001, over two years after OTI changed claim 1 in the United States application to “card” from “device,” OTI made a similar amendment to all claims in the European patent application, which was based on the PCT application. (Ex. F, hereinafter “EP Amendment”). In

response to a rejection by the European Patent Office on August 6, 2001, OTI amended all of the claims in the European application to recite a “data transaction card” instead of the originally claimed “data transaction device.” (Ex. F, EP Amendment at 25). The European patent to OTI issued with all claims reciting a “data transaction card.” (Ex. G, hereinafter “EP Patent”).

The graphic at **Ex. I** illustrates the relevant prosecution history of the ‘043 patent and corresponding European patent described above.

The fact that the Israeli application claims and the European patent claims recite a “card,” belie Mr. Itay’s statement that OTI “never intended that the invention be limited to this [a thin card] form factor.” (December 21, 2012 Declaration of Nehemya Itay, hereinafter “Itay Decl.” ¶ 20). In addition, the fact that the claims in *both* the United States and the European applications changed the claim language from device to card is inconsistent with OTI’s self-serving argument that the inclusion of “card” is simply “an obvious typographical error.” (OTI Br. at 9). To the contrary, the language was deliberate and intended.⁴

OTI points to the fact that the dependent claims in the ‘043 patent application were not amended (OTI Br. at 9-10), but that argument cuts against them. First, given the change from “device” to “card” in the independent claim, it is entirely likely that the error, if any, was the failure to change device to card in the dependent claims. As noted above, all the claims in the

⁴ If it were a typographical error, the applicants could have filed an amendment during prosecution under 37 C.F.R. 1.312 to fix it. Or, after the patent issued, OTI could have applied for a Certificate of Correction under 35 U.S.C. § 255 (1999). If, on the other hand, the change to card was intended, OTI should have filed a reissue application seeking to change “card” to the concededly broader “device,” but that option is closed now because there is a two-year limit from the issue date on such broadening reissue applications. 35 U.S.C. § 251 (2002) (“No reissued patent shall be granted enlarging the scope of the claims of the original patent unless applied for within two years from the grant of the original patent.”) OTI did none of those things.

European application were changed from “device” to “card,” and all of the claims in the parent Israeli patent application were filed as “card.” So the likely “error,” if any, was leaving the dependent claims as “device” in the ‘043 patent application.⁵ But whether there was an error, and what it was, is irrelevant under controlling law, as explained below. In any event, the dependent claims recite other limitations which make them narrower in that regard to the “card”/“device” scope.⁶

The Remarks section of the ‘043 patent application amendment also supports the conclusion that the change to “card” was deliberate and intended. (Ex. E, U.S. Amendment at 2). In that section, after having changed ‘device’ to ‘card’ in the preamble, OTI’s attorney continually referred to the “card” as the invention when distinguishing over the prior art. (Ex. E, U.S. Amendment at 2-4 (“the invention as claimed resides not in the mere collocation of common components which are admittedly found in all smart cards having both contact and contactless interfaces;” “One of the most attractive features of the present invention is that . . . the same smart card [can] be used for different applications.”) (all emphasis in original)). Those references evidence a deliberate use of the term “card” in claim 1.⁷

⁵ Additionally, if there were a typographical error, given the circumstances explained above, it is likely that the prosecuting attorney failed to include brackets around “device,” signifying deletion, and underlining of the word “card,” signifying addition. *See* 37 C.F.R. 1.121(c)(2) (“The text of any added subject matter must be shown by underlining the added text. The text of any deleted matter must be shown by . . . double brackets placed before and after the deleted characters”)

⁶ OTI’s argument that the dependent claims cannot broaden claim 1 (OTI Br. at 10) omits consideration that the dependent claims contain other limitations that further restrict the scope of claim 1. For example, dependent claim 2 requires that the semiconductor device “has separate i/o ports,” (Ex. A, ‘043 patent) which is a limitation not present in claim 1.

⁷ Furthermore, when allowing the claims of the application, the patent Examiner pointed out that the claimed invention was a data transaction “card.” (December 21, 2012 Declaration of Guy

OTI's reliance on the language of the specification describing a card as an example of a device to support its argument (OTI Br. at 10) is contrary to the case law. Federal Circuit law holds that, even when the reason for a claim amendment is unclear, if an applicant knew how to broadly claim subject matter, but elects to claim the narrower scope, then the unclaimed broader subject matter is disavowed and cannot be recaptured. *Zircon Corp. v. Stanley Black & Decker, Inc.*, 452 Fed. App'x 966, 978 (Fed. Cir. 2011). OTI, its expert, and named inventor Mr. Itay all admit that the term "card" is narrower than the term "device". (OTI Br. at 11-12; Apsel Rpt. at ¶¶ 41, 42; Itay Decl. at ¶¶ 19-20). Therefore, changing the claim during prosecution from "device" to "card" disavowed that arguably broader scope.

It is telling that while Dr. Apsel opines that the word "card" was allegedly a mistake by OTI's attorney (Apsel Rpt. at ¶ 44) (an issue of intent rather than expert opinion), OTI's other declarant, Mr. Itay, one of the named inventors, is noticeably silent about whether the term "card" was a mistake. Instead, his declaration refers to what the inventors "intended" their invention to be. (Itay Decl. at ¶ 20).⁸

Yonay, Exhibit 2D, Notice of Allowability at 2) ("The prior art fails to disclose the claimed data transaction card . . .") (emphasis added)

⁸ Both statements by Mr. Itay are improper and completely self-serving extrinsic evidence regarding the intended scope and applicability of the '043 patent. *O2 Micro Int'l Ltd. v. Beyond Innovation Tech. Co.*, 521 F.3d 1351, 1362 n.3 (Fed. Cir. 2008) ("an inventor's self-serving statements are rarely relevant to the proper construction of a claim term.") Dr. Apsel's speculation as to what OTI may or may not have intended during prosecution (Apsel Rpt. at ¶ 44) should be ignored by the Court. *Vitronics*, 90 F.3d 1576 (Fed. Cir. 1996) ("expert testimony in particular . . . may not be used to vary or contradict the claim language.")

b) Under Controlling Federal Circuit Precedent, The Court May Not Correct Any Alleged Typo When It Would Broaden Claim Scope Or Require Analysis Of Intent

OTI argues that the Court has the authority to correct claim 1 and replace “card” with “device.” (OTI Br. at 9-10). The case law is clear that courts do not have the ability to make a change of the type requested by OTI.

As noted, OTI admitted that the term “card” is narrower than the term “device.” (OTI Br. at 11-12; Apsel Rpt. at ¶¶ 41, 42; Itay Decl. at ¶¶ 19-20). The Federal Circuit has held it improper to correct a claim where: (a) the correction would broaden the scope of the claim; or (b) it would require an analysis of intent to determine which correction to use.

The *CBT Flint* case cited by OTI (OTI Br. at 9) recognizes that the Court may correct a claim only if “a person of skill in the art would find the claim to have the same scope and meaning under each of the [] possible meanings. . . .” *CBT Flint Partners, LLC v. Return Path, Inc.*, 654 F.3d 1353, 1358 (Fed. Cir. 2011). Given that OTI’s own expert admits that “device” has a different, and broader, scope than “card” (Apsel Rpt. at ¶¶ 41-43), *CBT Flint* would prevent the Court from making the change.

Additionally, the Court should not engage in “guesswork” to determine which of the two terms was intended. *Novo Indus., L.P. v. Micro Molds Corp.*, 350 F.3d 1348, 1358 (Fed. Cir. 2003) (“In order to make sense out of the patent, the district court was required to guess as to what was intended. That is beyond its authority.”) The prosecution history, discussed above, of the ‘043 patent and corresponding European patent strongly indicate a deliberate intent by OTI not only to use the term “card,” but to substitute “card” for “device” in places where “device” was used initially. Consideration of whether the applicants actually intended “device” in those places would require guesswork. The fact that OTI repeatedly referred to the invention as a

“card” (Ex. E, U.S. Amendment at 2, 4), made the same change from “device” to “card” in the corresponding European application (Ex. F, EP Amendment at 25-31), and did not attempt to correct the claims prior to filing the present suit, all militate against a conclusion of obvious typographical error. *Zircon*, 452 Fed. App’x at 976 (“The fact that the claims do not appear in the patent as, perhaps, they were originally intended is not a problem this court has the authority to remedy.”)

OTI cites factually distinguishable cases to support its “typo” argument. (OTI Br. at 9). The *Hoffer* case involved Court correction of an improperly numbered dependent claim, which the Court found was an error made by the U.S.P.T.O. prior to issuance of the patent. *Hoffer v. Microsoft Corp.*, 405 F.3d 1326, 1331 (Fed. Cir. 2005). No guesswork or broadening of claim scope was an issue in the case. Likewise, the corrections at issue in *CBT* and *Ultimax* involved no change of claim scope. In *CBT* the Court found that each of the three proposed corrections would have the same scope and meaning to one of skill in the art. *CBT Flint*, 654 F.3d at 1359. Similarly, in *Ultimax*, the addition of a comma between two elements in a chemical formula did not change the claim scope because no person of ordinary skill would understand the claim without a comma, and the correction was an obvious one. *Ultimax Cement Mfg. Corp. v. CTS Cement Mfg. Corp.*, 587 F.3d 1339, 1353 (Fed. Cir. 2009).

In sum, the term “card” may not be changed and should be given its ordinary meaning, such as that articulated by the Federal Circuit: a flat rectangular piece of stiff material. *E-Pass Techs., Inc. v. 3Com Corp.*, 473 F.3d 1213, 1219 (Fed. Cir. 2007).

B. “a semiconductor device for operating in said contact and contactless modes”

The ordinary meaning of the claim term is clear in light of the preamble: the semiconductor device operates in the two modes of operation of the card. (Winters Supp. Decl.

¶14). OTI's construction completely ignores the explicit recitation of "said" in the claim term and construes the term as if the claim language had been "a semiconductor device for operating in a contact and contactless mode." Such a construction is incorrect grammatically and under the law.

The Federal Circuit has held that the use of "said" refers back to the antecedent basis in the preamble. *Baldwin Graphic*, 512 F.3d at 1343 ("In grammatical terms, the instances of 'said []' in the claim are anaphoric phrases, referring to the initial antecedent phrase.")

As noted above and discussed in T-Mobile's opening brief at page 18, the reference to the card having the modes of operation in the preamble is important because it breathes life into the claim and provides the necessary structure of a card having a contact mode of operation for the remaining recited elements. (Winters Supp. Decl. ¶14). This reference back to the preamble, which is in T-Mobile's construction, is also consistent with the teachings of the specification:

- "It is an object of the invention to provide a data transaction card having contact and contactless modes of operation. . . ." (Ex. A, '043 patent, Col. 2, ll. 25-27) (emphasis added).
- "In accordance with a broad aspect of the invention there is provided a data transaction card having contact and contactless modes of operation." (Ex. A, '043 patent, Col. 2, ll. 34-36) (emphasis added).
- "Yet a further consideration associated with the increasing use of smart cards is the need to customize each smart card for the particular application for which it is destined. Obviously, the provision of both contact and contactless modes of data transfer increases the card's versatility. . . ." (Ex. A, '043 patent, Col. 2, ll. 12-18) (emphasis added).
- "It is thus apparent that the data transaction card 10 is extremely versatile. . . . This versatility derives, in part, from the simultaneous provision of contact and contactless modes of data transfer. . . ." (Ex. A, '043 patent, Col. 12, ll. 49-56) (emphasis added).

(Winters Supp. Decl. ¶14).

1. The '043 Patent Specification Defines "contact and contactless modes" Of Operation Of The Card

After omitting analysis of preamble antecedence, OTI then attempts to redefine contact mode of operation from how it is defined in the patent to a mode of operation completely divorced from the context of a card having a contact mode of operation, that is, a mode of operation of the semiconductor device "in which data is exchanged via the contact field using a contact data communications protocol." (OTI Br. at 12).

OTI's construction incorrectly rewrites the unambiguous claim language. Besides omitting the antecedence to the preamble, OTI's construction recites that the contact mode of operation *uses* the contact data communication protocol, whereas the claim language recites that the semiconductor device operates "with a respective contact or contactless data communications protocol." The intrinsic evidence is completely consistent with the language used in claim 1 and therefore need not be rewritten:

In the case of contact mode, the microprocessor 14 knows that both incoming and outgoing data is to be channeled via the first data i/o port, IO₁ in accordance with a communications protocol conforming to ISO 7816. In the case of contactless mode, the microprocessor 14 knows that both incoming and outgoing data is to be channeled via the second data i/o port, IO₂ in accordance with a contactless protocol stored within the microprocessor 14.

(Ex. A, '043 patent, Col. 8, ll. 57-65) (emphasis added).

OTI's construction improperly rewrites otherwise clear language to change its meaning. As T-Mobile has noted above, OTI's construction ignores the definition of contact mode of operation in the patent specification, while T-Mobile's construction is entirely consistent with it. (Winters Supp. Decl. ¶15).

The intrinsic evidence also includes the prior art that the patentees allegedly improved upon to obtain the allowance of claim 1. *V-Formation, Inc. v. Benetton Group SpA*, 401 F.3d 1307, 1311 (Fed. Cir. 2005) (“prior art cited in a patent or cited in the prosecution history of the patent constitutes intrinsic evidence.”) That intrinsic evidence informs one of ordinary skill in the art what the terms in the claims, “contact and contactless mode,” mean. The ‘043 patent explains:

Both “contact” and “contactless” devices are known per se. Generally, such devices are in the form of smart cards provided either with electrical contacts for effecting direct electrical contact with a card reader; or else they are provided with a coil antenna for effecting contactless bi-directional communication with a remote card reader. U.S. Pat. No. 5,206,495 for a Chip Card in the name of H.D. Kreft discloses a chip card allowing both contact and contactless communication in a single smart card.

(Ex. A, ‘043 patent, Col. 1, ll. 11-19) (emphasis added). That section provides further detail about the contact mode. (Ex. A, ‘043 patent, Col. 1, ll. 37-44) (“In the case where ‘contact’ data transmission is required, there is provided a so-called ‘contact field’ having a plurality of contacts Data transmission with an external reader is then effected by inserting the card into a suitable reader having spring-loaded contacts which bear on respective contacts in the contact field of the chip card.”) (Winters Supp. Decl. ¶¶9-10).

The ‘043 patent makes it clear that when the patentees use terms like “contact” and “contactless” modes of operation for a smart card, they are being used in the conventional way, *i.e.*, the way in which T-Mobile has construed these terms. (Winters Supp. Decl. ¶¶9-13). *Arthur A. Collins, Inc. v. Northern Telecom Ltd.*, 216 F.3d 1042, 1045 (Fed. Cir. 2000) (“When prior art that sheds light on the meaning of a term is cited by the patentee, it can have particular value as a guide to the proper construction of the term, because it may indicate not only the

meaning of the term to persons skilled in the art, but also that the patentee intended to adopt that meaning.”)

For the above reasons, the Court should reject OTI’s proposed construction of the term, and adopt T-Mobile’s construction that the term means “a semiconductor device for operating during the contact mode of operation of the card (as that term is construed [with respect to the preamble]) and for operating during the contactless mode of operation of the card (as that term is construed [with respect to the preamble]).”

C. “a contact field”

OTI’s construction for this term takes it completely out of context and construes the term as if it were simply “contacts” without any meaning to smart cards. OTI’s construction, “a set of galvanic connections with a semiconductor device” (OTI Br. at 16) would describe virtually all of the contacts in Figure 2. (Winters Supp. Decl. ¶20). However, the patentee only described the contact field (element 11 in Fig. 2, below) as *the* contact field (Ex. A, ‘043 patent Col. 3, ll. 56-58), so it must have a narrower meaning in the context of the invention. (Winters Supp. Decl. ¶19). The intrinsic evidence unambiguously explains that the term “contact field” carries a special meaning that is defined by the prior art U.S. Patent No. 5,206,495 (“Kreft ‘495”), which used the *exact* term to describe the exposed contacts on the card that interact with a card reader’s contacts. (Winters Supp. Decl. ¶19). As depicted in the ‘043 patent (and specifically labeled therein as “prior art”), Kreft ‘495 depicts the contact field in the conventional manner as shown below:

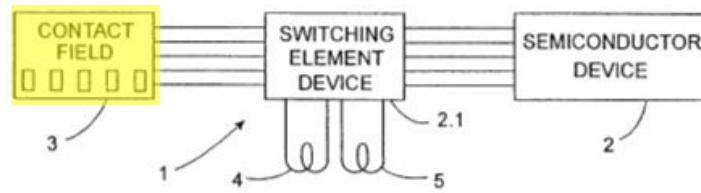


Fig. 1 (PRIOR ART)

(Ex. A, '043 patent, Fig. 1) (highlighting added). The '043 patent specification also defines the term “contact field” in the conventional manner:

In the case where ‘contact’ data transmission is required, there is provided a so-called ‘contact field’ having a plurality of contacts Data transmission with an external reader is then effected by inserting the card into a suitable reader having spring-loaded contacts which bear on respective contacts in the contact field of the chip card.

(Ex. A, '043 patent, Col. 1, ll. 37-44); (Winters Supp. Decl. ¶19).

The remainder of the '043 patent specification uses the term “contact field” consistently with Figure 2, which “shows functionally the data transaction card according to the invention.”

(Ex. A, '043 patent, Col. 3, ll. 19-20) (emphasis added). In that figure, a contact field (element 11, highlighted in yellow) includes multiple contacts (elements 12):

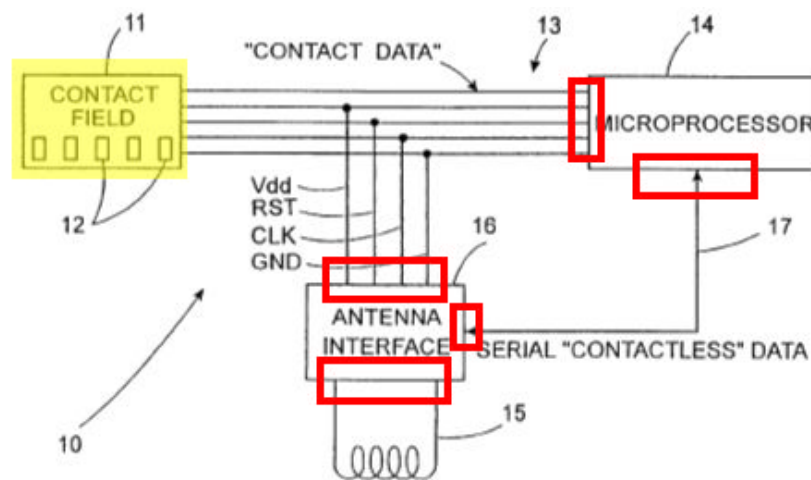


Fig. 2

(Ex. A, '043 patent, Fig. 2) (highlighting added).

By contrast, as noted, OTI's proposed construction of the term would read on any "galvanic connections" with a semiconductor device highlighted in Figure 2 in red above, *e.g.*, the contacts situated between the microprocessor (element 14) and the contact field (element 11), the contacts situated between the microprocessor and the antenna interface (element 16), or even the contacts situated between the antenna interface and the antenna (element 15). (Winters Supp. Decl. ¶20). The '043 patent specification does not support OTI's proposed construction.

Dr. Apsel, without citation to the intrinsic evidence, opines that "I don't believe there is any reason based upon the meaning of the term or its usage in the specification that would limit the contacts [of the contact field] to those on which respective card reader contacts can rest." (Apsel Rpt. at ¶65). This "opinion" disregards Figure 1 showing the "contact field" of Kreft '495, Figure 2 showing the only contact field of the "invention" and column 1, lines 37-44 of the '043 patent that defines the contact field with respect to the contacts of the reader. Indeed, there is no reason based upon the meaning of the term and the usage in the specification to construe "contact field" other than the way it is construed by T-Mobile. (Winters Supp. Decl. ¶21).

The specification does not evidence an intent to define any unexposed "contact" within the card as a "contact field," as OTI proposes. Instead, the specification clearly recites "a plurality of contacts on which respective card reader contacts can bear [rest]." (Winters Supp. Decl. ¶21).⁹

⁹ To be clear, T-Mobile is not suggesting that the required "reader" is limited to the preferred embodiment described in the specification. T-Mobile's position is that a "contact field" requires a reader of some kind that makes a physical and electrical connection with the contact field of the card to transmit data between the two.

OTI's brief, and its two declarations also urge that T-Mobile's construction requires a particular number, shape and position for the contact field. (OTI Br. at 16; Apsel Rpt. at ¶¶ 64-65; Itay Decl. at ¶¶24-25). T-Mobile's construction requires nothing of the kind. It only requires that a reader's contacts be able to bear, or rest, upon the contact field on the card, so as to provide a physical and electrical contact. (Winters Supp. Decl. ¶22).

For the above reasons, the Court should reject OTI's proposed construction of the term and adopt T-Mobile's construction that the term means "a plurality of contacts on which respective card reader contacts can rest."

D. "allowing data transmission between the contacts and the semiconductor device in accordance with said contact data communications protocol only during said contact mode"

OTI construes this term according to what it calls its ordinary meaning. (OTI Br. at 17). OTI's construction is improper because it completely ignores the file history estoppel that was created during prosecution to obtain allowance of the claim over the prior art.

*1. Arguments Made During Prosecution And Ignored In OTI's Brief
Shed Light On The Term's Meaning*

In order to understand the effect of the arguments made during prosecution, it is helpful to understand what was disclosed in the patent regarding data transmission on the contact field contacts.

The patent specification teaches that "data may be present on the contact field even when data is present on the coil antenna." (Ex. A, '043 patent, Col. 13, ll. 23-29). This means that data could be received by the antenna and be present on the contactless data line (element 17 in Fig. 2) to the microprocessor, even when an external reader has its contacts resting on the contact field and providing data on the contact data line to the microprocessor. The '043 patent explains

that “the microprocessor may be programmed to [a] relate to the data on only one of the data lines [*e.g.*, the contactless data line *or* the contact data line] or [b] on both data lines simultaneously [*e.g.*, the contactless data line *and* the contact data line] according to a predetermined protocol.” (Ex. A, ‘043 patent, Col. 13, ll. 22-29; Winters Supp. Decl. ¶¶25-27).

During prosecution, the applicants amended claim 1 to recite “allowing data transmission between the contacts and the semiconductor device in accordance with said contact data communications protocol only during said contact mode.” (Ex. E, U.S. Amendment at 1) (emphasis in original). That limitation described the embodiment where the microprocessor receives data on only one of the data lines in the contactless mode. (Ex. A, ‘043 patent, Col. 13, ll. 26-28; Winters Supp. Decl. ¶28).

That meaning was unambiguously argued to the patent Examiner by OTI. Applicants argued that “the presence of **an electromagnetic field on the antenna coil automatically** enables contactless operation of the smart card and, by the same token, **disables the contact field**.” (Ex. E, U.S. Amendment at 3) (emphasis added). That is, the applicants explained that this limitation was accomplished by disabling the contact field when data is present on the antenna coil and accordingly on the contactless data line. (Winters Supp. Decl. ¶29). OTI’s brief conveniently ignores that argument in the file history.

Evidencing a clear and unambiguous disavowal of claim scope, the applicants further emphasized that limitation two more times in the same amendment:

- “Herein claim 1 was amended to emphasize that the contacts are fixedly connected to the semiconductor device during both modes, contact or contactless, of data transmission. However, the contacts perform on a selective basis, that is, only in the contact mode.” (Ex. E, Amendment at 2) (emphasis added).
- “fundamental to an understanding of the invention, is expressed by the statement that the contact field includes contacts **fixedly** connected to the semiconductor

device during both modes, but transmit data only in contact mode.” (Ex. E, Amendment 2-3) (emphasis in original).

Computer Docking Station Corp. v. Dell, Inc., 519 F.3d 1366, 1374 (Fed. Cir. 2008) (patentee narrows claim scope by “clearly characterizing the invention in a way to try to overcome rejections based on prior art”). Both of those statements show a clear intention to limit the claim such that the contactless operation of the card disables the contact field. (Winters Supp. Decl. ¶30).

OTI’s brief does not address the meaning of those arguments made by the applicants, but instead tries to shift focus to the similarities between Kreft ‘812 and Kreft ‘495, an irrelevant tack. (OTI Br. at 20). The applicants made a clear and unambiguous argument, three times over, for limiting the claim such that the contact field is disabled during contactless operation of the card. (Winters Supp. Decl. ¶29-30).

Despite the unambiguous disavowal of scope by OTI during prosecution, OTI and its expert, Dr. Apsel, argue that claim 1 could not be limited to that embodiment for two reasons. (OTI Br. at 22).

a) Claim Differentiation Overcome By Arguments Made During Prosecution To Limit Claims

OTI argues that claim 25 would be contradicted if the Court adopted T-Mobile’s construction because claim 25 recites subject matter disavowed by the arguments made during prosecution. (OTI Br. at 22). Under OTI’s theory of “claim differentiation,” claim 1 has to be broad enough to encompass claim 25. However, that is not the law.

The Federal Circuit considers express statements made by the applicant limiting even in light of contradicted dependent claims. *ERBE Elektromedizin GmbH v. Canady Tech. LLC*, 629 F.3d 1278, 1286 (Fed. Cir. 2010) (Rejecting patentee’s claim differentiation argument in light of

a seemingly broader dependent claim and holding that “the prosecution history establishes that the . . . prior art patent was distinguished based on this ‘low flow rate’ limitation and thus this term as it appears in the asserted claims is limited.”)

2. *T-Mobile’s Proposed Construction Is Not Unduly Limiting*

OTI argues that T-Mobile’s “interpretation would not have helped OTI overcome the prior art [during prosecution]. . . .” and “the claim amendment as interpreted by T-Mobile would not have been necessary or even helpful in overcoming the prior art cited by the Examiner.” (OTI Br. at 21).

The Federal Circuit cautions against an analysis of the “sufficiency” of a limiting statement to overcome the prior art, because applicants often give up more claim scope than necessary to obtain a patent:

. . . it frequently happens that patentees surrender more through amendment than may have been absolutely necessary to avoid particular prior art. In such cases, we have held the patentees to the scope of what they ultimately claim, and we have not allowed them to assert that claims should be interpreted as if they had surrendered only what they had to.

Norian Corp. v. Stryker Corp., 432 F.3d 1356, 1361-1362 (Fed. Cir. 2005).

Instead, the issue is whether the prosecution arguments are clear and unambiguous such that they narrow claim scope, not their sufficiency to overcome the prior art. Making an argument three times that the contact field is disabled during the contactless mode, or that the contacts perform only in contact mode, shows clear and unambiguous disavowal of claim scope. (Winters Supp. Decl. ¶30). Given that the alleged point of novelty in the ‘043 patent in overcoming the Kreft ‘495 reference is the elimination of a switching element between the contact field and the semiconductor device and how and when the contact data was transmitted to the semiconductor device as a result, the disavowal was essential to patentability in any event.

OTI also argues that “the ‘043 Patent is not limited to exclusive (non-simultaneous) use of the two dedicated data lines.” (OTI Br. at 21-22). While T-Mobile agrees that the ‘043 specification broadly teaches such operation (Winters Supp. Decl. ¶27), clear and unambiguous arguments made by the applicants during prosecution disavowed that broad claim scope. *Computer Docking Station*, 519 F.3d at 1374 (patentee narrows claim scope by “clearly characterizing the invention in a way to try to overcome rejections based on prior art”). Applicants, for whatever reason, elected to claim that the contact field is disabled during contactless operation of the card. (Winters Supp. Decl. ¶¶30, 31).

OTI relies on the declaration of Dr. Apsel to reargue differences between the claims and the prior art cited by the Examiner. (Apsel Rpt. at ¶¶ 80-87). In doing so, OTI simply casts aside the prosecution arguments that OTI did make and tries to substitute contradictory extrinsic evidence for the unambiguous intrinsic evidence. That is too late and improper.

3. *OTI’s Construction Also Incorrect
For Reading Limitations Into The Claim*

In “rewriting” the meaning of this term in its construction, OTI adds limitations that are not present in the claim term: the contact data communications protocol is different from the contactless data communications protocol, and the semiconductor device has a contact-data input/output port only for contact mode. (OTI Br. at 22-23).

a) The Contact Data Communications Data Protocol
Is Not Necessarily Different Than The Contactless Data Protocol

The claim does not require that the contact and contactless data protocols must be different, as argued by OTI. (OTI Br. at 22-23). Although the specification indicates that there may be “separate communications protocols,” (Ex. A, ‘043 patent Col. 4, ll. 25-27) that is a preferred embodiment and does not limit the scope of the claim (Winters Supp. Decl. ¶33).

OTI's reliance on Dr. Apsel and Mr. Itay to explain why the protocols must be different (OTI Br. at 22-23), again, seeks to limit the claim to a preferred embodiment and argues a limitation that is not explicitly present in the claim.

b) The Contact Data Only Input/Output Port
Is Not In The Claim Language

Here again, Dr. Apsel goes into detail as to how one preferred embodiment of the claimed card works and attempts to use the embodiment to read limitations into the claim. (Apsel Rpt. at ¶¶ 72-76). It should be noted however, that the applicants never argued the importance of two input/output ports during prosecution, like they did with respect to the disabling of the contact field (Ex. E, U.S. Amendment at 3). In addition, claim 2 specifically recites that the semiconductor device has a separate contact input/output port. (Ex. A, '043 patent); (Winters Supp. Decl. ¶34). OTI's construction would contradict claim 2 without any overriding disavowal of scope.

For the above reasons, the Court should reject OTI's proposed construction of the term and adopt T-Mobile's construction that the term means "data transmission is permitted between the contacts and the semiconductor device in accordance with the contact data communications protocol during the contact mode of operation of the card, and data transmission is not permitted between the contacts and the semiconductor device during the contactless mode of operation of the card."

E. "at least some"

OTI's brief admits that "the word 'some' generally means an unspecified or indeterminate number" (OTI Br. at 23), which is in accordance with T-Mobile's proposed construction. The definition for the words "at least," which OTI omits analysis of in its brief, means "at the minimum." (T-Mobile's Opening Brief, Declaration of Jack Winters at Ex. Q).

Those definitions together support T-Mobile's construction for the term as meaning "an indeterminate number that includes all."

OTI argues that "some" cannot include one because the preferred embodiment requires that "some contacts" be "at least two contacts in the contact field: Vdd and ground (GND)." (OTI Br. at 23-24). That argument however, ignores another disclosed embodiment in the '043 patent, the one which states that the contact field comprises "a plurality of contacts". (Ex. A, '043 patent, Col. 1, ll. 37-40).

A "plurality" is concededly two or more. Accordingly, one disclosed embodiment of the '043 patent is a contact field with only two contacts. In that disclosed embodiment, "at least some" contacts can be one or two contacts. (Winters Supp. Decl. ¶¶38-39).

For the above reasons, the Court should reject OTI's proposed construction of the term and adopt T-Mobile's construction that the term means "an indeterminate number that includes all".

IV. CONCLUSION

For the reasons set forth above, T-Mobile respectfully requests that the Court deny OTI's proposed claim constructions, and in the alternative adopt T-Mobile's proposed constructions of the disputed terms. T-Mobile's constructions are consistent with the intrinsic and extrinsic evidence.

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CERTIFICATE OF SERVICE

Pursuant to the Federal Rules of Civil Procedure, I hereby certify that on the 18th day of January 2013, I filed a true and correct copy of the foregoing via the Court's ECF Notification System, causing a copy to be served upon the following counsel of record:

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